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Patent Medicines in Nineteenth-Century America

John Parascandola



Bygone Remedies. (Photo courtesy of The Pearson Museum)

Patent Medicines in Nineteenth-Century America

by John Parascandola

In 1908 the British author H. G. Wells, widely known for earlier works of science fiction such as *The Time Machine* and *The War of the Worlds*, published a novel on a much more mundane theme. *Tono-Bungay* is the tale of a quack patent medicine by that name, of its inventor Edward Ponderevo, and of his nephew George, who narrates the story. The brief excerpt that follows recounts the conversation between nephew and uncle after the former has just seen the facilities where the product is made and been informed of its ingredients. George, convinced that the tonic is a swindle, asks:

"You don't mean to say you think doing this stuff up in bottles and swearing it's the quintessence of strength and making poor devils buy it at that, is straight?"

"Why not, George? How do we know it mayn't be the quintessence to them so far as they're concerned?"

"Oh!" I said and shrugged my shoulders.

"There's Faith. You put Faith in 'em.... I grant our labels are a bit emphatic. Christian Science, really. No good setting people against the medicine. Tell me a solitary trade nowadays that hasn't to be—emphatic. Its the modern way! Everybody understands it—everybody allows for it."

"But the world would be no worse and rather better, if all this stuff of yours was run down a conduit into the Thames."

"Don't see that, George, at all. 'Mong other things, all our people would be out of work. Unemployed! I grant you Tono-Bungay may be—not quite so good a find for the world as Peruvian bark,* but the point is, George—it makes trade! And the world lives on trade."

^{*}Cinchona bark, from which is derived the alkaloid quinine, used in treating malaria.

Wells was writing about a problem that has plagued mankind over the ages, the problem of medical quackery. In the half century or so preceding the publication of *Tono-Bungay*, however, patent medicine quackery had entered its golden age. In 1906, a congressional committee estimated that there were 50,000 patent medicines made and sold in the United States.² That same year also marked the beginning of federal regulation of such medicine through the passage of the 1906 Food and Drug Act. The development of the patent medicine trade in the period before federal regulation provides the focus for this essay.

To trace the roots of the patent medicine industry in America, however, it is necessary to go back to England in the seventeenth and eighteenth centuries. European monarchs had long been accustomed to granting monopoly privileges for the development of new industries, the discovery of new lands, and so on. These privileges were granted in the form of a letters patent (from the Latin patens, or "open") from the ruler. In seventeenth-century Europe, various monarchs gave letters patent to proprietors of certain medical remedies. Monopoly privileges often were granted to favorites of the ruler, or to those who enriched the royal treasury.

In England, where the powers of the monarch were not so absolute, Parliament enacted a law designed to curb the arbitrary granting of letters patent by the Crown. The Statute of Monopolies of 1624 limited the granting of patents to manufacture new to the country, and permitted the right of sole manufacture for a period of only fourteen years. The concept of a new invention obviously was interpreted very loosely, at least with respect to patent medicines, for these products ordinarily did not offer anything novel, except possibly different combinations or revised proportions of ingredients already in widespread use.

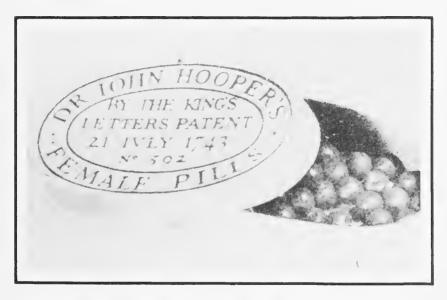
In eighteenth-century England, letters patent were granted to numerous compound medicines such as Stoughton's Elixir, Hooper's Female Pills, Bateman's Pectoral Drops, and Turlington's Balsam of Life. In addition, scores of other proprietary remedies that were not patented, such as Daffy's Elixir and Godfrey's Cordial, were also on the market. In composition they were very similar to recipes which could be found in the formularies and pharmacopeias of the period. These remedies were given proprietary names, packaged in distinctive bottles, and boldly advertised. The ingredients, sometimes numbering twenty or more, generally were kept secret.

(A)

With hundreds of such proprietary remedies on the market, the public could not keep track of which ones actually were patented.

The term *patent medicine* eventually was applied to all these products. As such, the original meaning was lost, and the term came to refer to proprietary or trademarked remedies intended for self-medication.³

It was not long before the English patent medicines were introduced into the American colonies. Newspaper advertisements, broadsides and pamphlets provide evidence that some of these remedies were available to colonists as early as the first half of the eighteenth century. The popularity of patent medicines increased significantly after about 1750. Conditions were ripe for the spread of patent medicines in the colonies, where medical standards were lax.



Dr. John Hooper's Female Pills, granted a "letters patent" by the British Monarch in 1743. (Photo courtesy of The Smithsonian Institution)

Some American apothecaries began imitating English patent medicines at an early date. Usually they would refill empty bottles of a popular remedy, such as Bateman's Pectoral Drops, with their own preparation. Customers looked for the name of the product and the shape of the bottle when making a purchase; the actual ingredients could vary significantly without their noticing. A few entrepreneurs even made medicines under their own tradenames and tried to compete with the English brands, but they were not very successful. The Revolutionary War, however, gave American makers of patent medicines a great boost as the supply of medicines from Britain was cut off and a feeling of patriotism towards American-made products developed. The English patent medicines

never regained their popularity after the War was over.4

In 1796, the young United States government granted its first patent for a medical device to Elisha Perkins, who invented a pair of metal rods called "tractors." Perkins was a Connecticut physician who obviously was influenced by the electrical experiments of Galvani, Franklin and others. Each of his rods consisted of an alloy of several different metals. Drawn or stroked across the afflicted area of the body, these rods were supposed to draw off the noxious electrical fluid that caused illness and pain. Tractors became quite popular both in the United States and in Europe.⁵

Just a few months after Perkins had patented his tractors, Samuel Lee, Jr., also of Connecticut, became the first American to patent a medicine—his "Bilious Pills." The vast majority of American "patent medicines," however, were not patented. Manufacturers instead tried to secure protection for their products by other means, such as establishing trademarks and copyrighting promotional literature and labels.



"Metallic Tractors," an 1801 caricature by James Gillray, pokes fun at the supposed electro-therapeutic properties of Elisha Perkins' metallic rods.

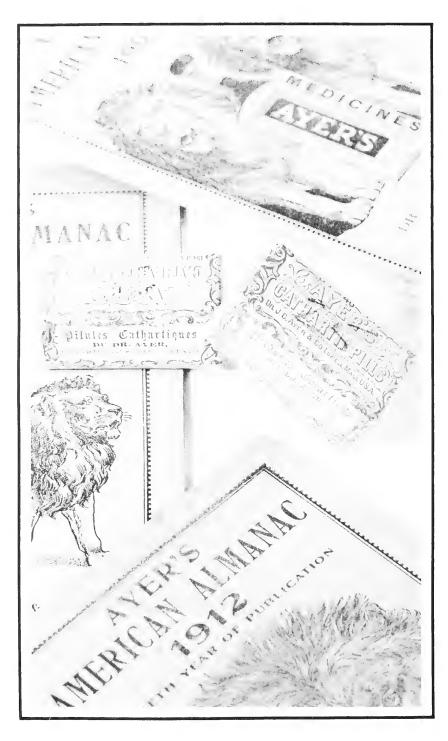
(Photo courtesy of William H. Helfand)

Various factors contributed to the growth of patent medicine trade in the first half of the nineteenth century. Americans suffered from a plethora of diseases (for example tuberculosis, typhoid, cholera and pneumonia) which medicine could do little to cure. Many physicians resorted to "heroic" therapeutic measures, such as excessive bloodletting and dosing of patients with potent purgatives and emetics. Some of their patients turned instead to the promises of patent machine vendors, whose medicines often were made quite palatable to increase their appeal. Sugar-coated pills, for example, were first introduced in America on a large scale by patent medicine makers. The spirit of "Jacksonian Democracy" emphasized the virtues of the common man and fostered a distrust of professional elites. In such an atmosphere self-medication flourished. The spread of newspapers and the increase in the literacy rate also helped patent medicine makers to expand their market through advertising.7

After the Civil War, patent medicine quackery really entered its golden age. Thousands of products flooded the market. As the cost of getting into business was relatively small and no great knowledge was required, many would-be entrepreneurs entered the field. As one Ohio newspaper editor wrote, any "idle mechanic" could join the fold of patent medicine manufacturers. He simply "gets a dispensatory, or some old receipt book, and poring over it, or having it read to him..., he finds that mercury is good for the itch and old ulcers; that opium will give ease; and that a glass of antimony will [cause a patient to] vomit. Down goes the hammer, or saw, razor, awl, or shuttle—and away to make electuaries, tinctures, elixirs, pills, plasters and poultices."

The promotion of these products, however, proved much more difficult. The heavy competition meant that in order to be really successful, large sums had to be spent on advertising. About 1850, for example, Benjamin Brandreth was spending nearly \$100,000 a year advertising his Universal Vegetable Pills. One of the most popular remedies was Lydia Pinkham's Vegetable Compound for the treatment of diseases of women. At the close of the nineteenth century, the annual advertising budget for the remedy was about one million dollars.⁹

The patent medicine manufacturers were the real pioneers of American advertising techniques. They did not rely solely on newspaper and magazine advertisements, but promoted their wares in every imaginable way. They distributed pamphlets and brochures, of course, but they recognized that such items are readily discarded. A better method was to give to customers something they would not throw away, but keep and refer to



Patent medicine almanacs, such as those produced by the Ayer's Company, carried advertising messages for these products. (Photo courtesy of The Pearson Museum)

frequently, thus repeatedly coming across the included advertising material. Patent medicine almanacs were a common advertising technique. Month after month, day after day, persons looking up information in these almanacs were confronted with ads for some product or other. Calendars were another popular medium of advertising. Therapeutic guides or other home medical books also had appeal, and naturally the suggested remedy for all kinds of medical problems was the infallible medicine produced by the publisher of the book. These guides to health often were illustrated with morbid and exaggerated pictures of what could happen to those who failed to resort to the appropriate wonder drug in time. Books of stories, such as fairy tales for children, were also utilized. with advertisements interspersed throughout, like commercials during a television show. Cookbooks, coloring books, joke books and other such publications all helped patent medicine makers to sell their products. Colorful trade cards, designed to be collected, were common. Outdoor advertising, in the form of posters on horse carriages, billboards, men walking the streets with sandwich boards, and so on, was not overlooked. Trees, walls, barns, rocks and mountains were painted with the names of various remedies. 10

Among the most colorful and direct advertising gimmicks were the medicine shows, which had their roots in the European mountebanks operating at fairs, market squares and busy street corners. ¹¹ These traveling quacks combined their pitch for the remedies they sold with a free show of some sort (tricks, music, comedy) to attract the attention of the crowd. ¹²

In spite of efforts to curtail medicine shows, they became a flourishing form of entertainment in nineteenth-century America. The sale of patent medicines was combined with various forms of entertainment: plays, minstrel shows, vaudeville, magic, pantomine, animal acts, puppet shows, and so on. Medicine shows ranged from one or two-person operations to large troupes of performers that might put on a small circus or a Wild West show. In rural and small-town America, before the invention of radio and motion pictures, these shows provided one of the few forms of entertainment and were extremely popular.

Medicine show owners could prepare their own remedies or order them from patent medicine manufacturers. Sometimes they simply sold standard products (for example Ayer's or Hood's Sarsaparilla), but often they sold medicines under their own label—even though in fact the product might be a stock liniment or herb remedy ordered from some manufacturer. Dozens of suppliers catered to the medicine shows. A typical small operation located in Illinois was the Clifton Remedy Company of Girard, founded in 1899 by

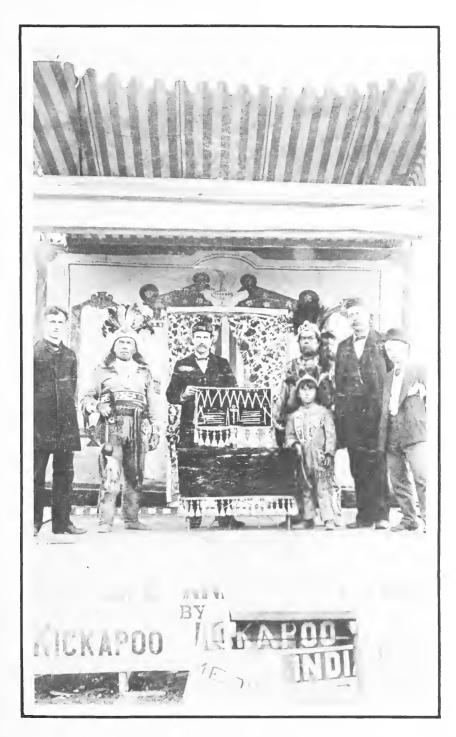
Abraham Lincoln Dix and Dr. Henry W. Clifton. The company made thirteen products, which were sold both to drug wholesalers who supplied the medicine shows, and also directly to the medicine men themselves.¹³

One of the better-known medicine shows was operated out of Chicago by John Hamlin, a former traveling magician, and his brother Lysander. Hamlin's Wizard Oil was basically a liniment. but it was advertised for a host of ills (such as pneumonia and cancer). It contained camphor, ammonia, chloroform, sassafras, cloves, turpentine and an alcohol content of from 55 to 70 percent. Wizard Oil was taken internally for some ailments. In the latter part of the nineteenth century, the Hamlins sent out musical troupes to spread the word about Wizard Oil and other products. Each troupe—which consisted of a driver, a lecturer, and a vocal and instrumental quartet—traveled in a horsedrawn wagon with a built-in parlor organ. The vehicle essentially was a small rolling stage. Although Wizard Oil was sold to spectators at the musical performances, the chief function of the troupes was to create a demand for Hamlin products. Unlike most medicine shows, in other words, the Hamlin troupes were more interested in advertising than direct sales. The tone of the shows was conservative and rigidly proper, featuring innocuous sentimental or comic songs. 14

Bigger and more exciting were the Indian shows of the Kickapoo Indian Medicine Company. Although this company was located in Connecticut, its medicine shows traveled the nation, peddling Kickapoo Indian Sagwa, Kickapoo Indian Oil, Kickapoo Indian Salve and similar remedies. Poet Carl Sandburg had vivid memories of attending these shows as a boy in Galesburg, Illinois. He recalled being deeply impressed by the sight of the Indians "stomping and howling their lonesome war songs" and by the eloquence of the lecturers. 15

Patent medicine makers cleverly exploited all types of human needs and emotions in order to promote their products. ¹⁶ Fear, naturally, played a large role in many advertising campaigns. Grim advertisements depicted death, disease, suffering and evil, often exaggerating symptoms and even normal physiological phenomena into sure signs of dreaded diseases. The message was clear: death might strike at any moment if the appropriate remedy were not applied in time.

Dr. F. G. Kinsman, for example, advised readers of his advertisements that they should immediately procure his Heart Tablets if they noticed any of the following symptoms: fluttering, palpitation or skipping beats; shortness of breath from going



Kickapoo Medicine Show, Marine, Minnesota, about 1890. (Photo courtesy of Minnesota Historical Society)



Some patent medicines, such as those produced by the Kickapoo Indian Medicine Company, were falsely promoted as American Indian remedies.

(Photo courtesy of The Pearson Museum)

upstairs, walking, etc.; tenderness, numbness or pain in left side or arm; fainting spells, dizziness, hunger or weak spells; spots before the eyes; sudden starting in sleep, dreaming, nightmare; choking sensation in throat; oppressed feeling in chest; cold hands and feet; dropsy; swelling of feet or ankles; or neuralgia around the heart. With such a catalog of symptoms, few could escape the need for Heart Tablets. Kinsman warned: "If you have heart disease you are in grave danger. You may die any minute—anywhere." 17

Not surprisingly, sex was also exploited by the promoters of patent medicines. There were numerous products on the market that claimed to restore sexual vitality to aging men, to cure sexual debility or impotence, or to improve sexual performance. Sometimes these products were associated with polygamous religions or social systems. Dr. Raphael's Cordial Invigorant, for example, supposedly was derived from a recipe of an Arab sheik who had sired seventy-seven children by several wives, including one born when the father was at the ripe old age of $109.^{18}$ Among the more well-known of such remedies was Mormon Elders' Damiana Wafers, which traded on the presumed virility of Mormon men, who could have more than one wife. The covers of one pamphlet for this product showed an elderly gentleman looking at a sign for Damiana Wafers, followed by a scene in which the same man is seen enthusiastically embracing a fair young maiden. The message was clear!



Trade or advertising card for Carter's products. (Photo courtesy of The Pearson Museum)

Another approach to sexual rejuvenation that came into vogue in the late nineteenth century was the use of glandular extracts. In 1889, noted French physiologist Charles-Edouard Brown-Sequard announced that, at the age of seventy-two, he had injected himself with aqueous extracts of ground animal testicles and observed increased strength, vigor and mental activity. ²⁰

Brown-Sequard's claims stimulated a great deal of interest and controversy in both lay and scientific circles, and they were soon exploited by medical charlatans. Orchis Extract, a Chicago patent medicine for "weak men," supposedly was a substance made from the testicles of rams. Baker's Glandol, advertised for both men and women, claimed to be derived from the "vital glands" of young animals. These products illustrate another tool of patent medicine manufacturers, who sometimes seized upon the latest scientific development and cloaked their medicines in scientific garb (although frequently implying that they had transcended the bounds of the science of their day in discovering their own miracle drug).

Patriotism figured prominently in many advertisements. For example, virtues of Pluto Water ("America's Physic") and other concoctions were extolled by Uncle Sam. An advertisement for another laxative product showed him signing a document that read "This is to certify that I am using 100,000 boxes of Ex-Lax every month." Patriotic symbols such as the flag, or national heroes or heroines such as General Custer and Molly Pitcher, were also employed in patent medicine ads. Even the President was not spared: President Harrison's portrait was appropriated by St. Jacob's Oil and Warner's Safe Cure. ²²

Patent medicine makers also relied on the lure of the exotic to help sell their products. Ancient times and foreign lands lent a certain appeal to some remedies. Dr. M. S. Watson's Great Invincible Birghami Stiff Joint Panacea, for example, supposedly had been rediscovered along the Nile. Other exotic-sounding products included Dr. Drake's Canton Chinese Hair Cream, Mexican Mustang Linament, Hayne's Arabian Balsam, Peruvian Syrup and Roman Eye Balsam.²³

The American Indian was not really long ago and far away, but sufficiently exotic and mysterious to many Americans in the late nineteenth century (especially in the eastern part of the country) to be an effective symbol in patent medicine promotion. Countless medicines were advertised as Indian remedies. The Kickapoo Indian Medicine Company preparations, for example, purportedly were made on a Kickapoo reservation by wise medicine men. Advertisements claimed that even the owners of the company did not know the formulas for these products. Advertising literature for Dr. Morse's Indian Root Pills told the story of how the good doctor (who actually never existed) discovered the secret of the remedy while living for three years among the Indians.²⁴



Laxatives were popular self-medication remedies. (Photo courtesy of The Pearson Museum)

Suggestions that the inventor of a patent medicine had discovered some secret ingredient or process was common. The appeal of this approach was described nicely by the British Medical Association in a publication entitled Secret Remedies: What They Cost and What They Contain:

One of the reasons for the popularity of secret remedies is their secrecy.... To begin with, there is for the average man or woman a certain fascination in secrecy. The quack takes advantage of this common foible of human nature to impress his customers. But secrecy has other uses in his trade; it enables him to make use of cheap new or old fashioned drugs, and to proclaim that his product possesses virtues beyond the ken of the mere doctor: his herbs have been culled in some remote prairie or among the mountains of Central Africa, the secret of their virtues having been confided to him by some venerable chief: or again he would have us believe that his drug has been discovered by chemical research of alchemical profundity, and is produced by processes so costly and elaborate that it can only be sold at a very high price.²⁵

Testimonials from those who had been cured were also a frequently used and effective advertising technique. Patent medicine makers displayed in their advertisements all sorts of statements attesting to the efficacy of their products. There were letters from famous people and from not-so-famous people, from political figures, entertainers, clergymen, lawyers, housewives and even physicians. Some of these were fictitious or bought, but it was not difficult to acquire genuine testimonials from individuals who sincerely believed that they had been helped by the remedy in question. Even animals provided testimonials on behalf of patent medicines. One ad for Castoria indicated that Jumbo, the famous circus elephant, fed this remedy to her baby. ²⁷

Although physicians might have to admit their inability to treat certain cases effectively, patent medicine manufacturers could guarantee a sure cure every time. No disease was too serious and no case too hopeless for patent medicines. Everything from cancer to problems such as bad breath could be cured by one product or another. Some were even good for both man and beast. Money-back guarantees were offered to prove the sincerity of the manufacturer. In fact, some manufacturers offered more than one's money back: they offered to pay considerable sums of money for evidence of cases which their products could not cure. Patent medicine makers were never modest about the value of their products. Dr. King's



Patent medicine makers sometimes relied on the lure of exotic foreign names to sell their products. (Photo courtesy of The Pearson Museum)

New Discovery, for example, was ranked by its proprietor with the telephone, the railroad, the steamship and other great inventions of the nineteenth century. 28

A review of some of the more common ingredients in nineteenth-century patent medicines is revealing. Alcohol commonly was found in some of these products, especially in the remedies labelled "bitters." Hostetter's Bitters, for example, contained somewhere around 40 percent alcohol (about 80 proof), along with a mixture of herbs. In the Alaska territory, where the importation of distilled spirits was forbidden at the time, it was sold by the drink in saloons. Bitters were also sold in bars in the States. The problem was common enough that in 1883 the Commissioner of Revenue ruled that when such products were sold across the counter as a drink, rather than in the bottle as a medicine, they would be treated as liquor and subject to the appropriate tax and licensing laws. ²⁹



A few of the many "tonics" that have occupied a prominent place in the self-medication market over the years. (Photo courtesy of The Pearson Museum)

No doubt the extension of the temperance movement in the nineteenth century contributed to the sale of these bitters, especially in "dry" areas. Hostetter himself was a great supporter of temperance, although he insisted that medicines must not abandon the use of alcohol, because of its excellence as solvent and preservative. Since the ingredients of medicines did not have to be shown on the label, sometimes consumers were unaware of the alcoholic content of certain medicines, which led to some interesting situations. In 1904, for example, the editor of the Ladies' Home Journal wrote to fifty members of the Women's Christian Temperance Union and found that three out of four used patent medicines having an alcoholic content of from one-eighth to one-half. 30



"Pe-Ru-Na," one of the more durable and popular of the patent medicines. (Photo courtesy of The Pearson Museum)



Exotic images helped to sell patent medicines, as in this advertising card for Scott's Emulsion. (Photo courtesy of National Library of Medicine)

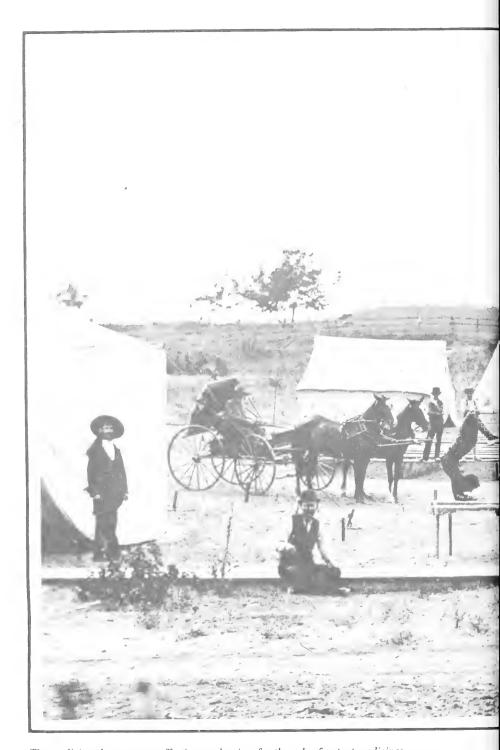
Opiates were also found in certain patent medicines, particularly in the soothing syrups designed for pacifying babies. Mrs. Winslow's Soothing Syrup, for example, contained morphine sulfate as the active ingredient. Needless to say, such medicine relieved the baby's teething pains or other distress, but involved the risks of a fatal overdose or addiction to the drug. In nineteenth-century England, where working mothers frequently left their children in the hands of unskilled day nurses, narcotic medicines were employed freely. Sometimes a nurse would agree to reduce her salary if a mother provided a "quietening mixture" for her child. Although Mrs. Winslow's Soothing Syrup was an American-made remedy, it was popular in England and commonly referred to as "Quietness" there. 31

Narcotics also were found in cough mixtures. Dr. Bull's Cough Syrup, for example, consisted essentially of morphine sulfate dissolved in a sugar syrup. When heroin was first introduced at the end of the nineteenth century, it too appeared in some cough remedies. In fact, narcotics frequently were found in the very remedies that were supposed to cure the drug habit. As long as addicts were taking the "cure," they did not suffer withdrawal symptoms.³²

There were also other active ingredients in patent medicines that could be dangerous—such as cocaine. Acetanilid, an ingredient in many headache remedies, was particularly criticized by opponents of the patent medicine trade. There were numerous reports of deaths due to overdose of acetanilid, which was present in such proprietary remedies as Antikamnia and Orangeine.³³

A great many patent medicines, however, were virtually harmless. It was not so much a question of whether these products directly injured patients, but whether purchasers were getting their money's worth, and whether patients' health was affected indirectly when they neglected to seek proper medical care in favor of self-treatment with a patent medicine. Some ingredients were relatively inert by today's pharmaceutical standards. Yet substances such as celery and wild cherry were advertised as wonder drugs.

There were products which were totally worthless. Radam's Microbe Killer, for example, consisted of a trace of hydrochloric acid, a bit of sulfuric acid, a little red wine and about 99.4% of that miracle drug $\rm H_2O.^{34}$ Many other ingredients did have some pharmacological activity (such as laxative or expectorant properties), but rarely did they possess the benefits and powers attributed them in advertisements. Among the commonly used



The medicine show was an effective mechanism for the sale of patent medicines.



Shown here is Dr. Matthew's Medicine Show, Black River Falls, Wisconsin in the 1890's. (Photo courtesy of State Historical Society of Wisconsin)

botanical ingredients, the following examples may be cited: aloe, camphor, ipecac, peppermint, rhubarb, sarsaparilla, sassafras and wintergreen. 35

Nineteenth-century patent medicines thus ranged from those that could relieve minor symptoms associated with illness, to those that were essentially worthless, to those that were potentially dangerous. Clearly they could not be used effectively in treating cancer, tuberculosis, heart disease, syphilis, gout and the many other serious diseases for which they were sold as sure cures. Yet these products were enormously popular and huge sums of money were spent on their purchase. The manufactured value of American patent medicines in the year 1904 was about 75 million dollars (the retail value would have been higher still).³⁶

How could so many people apparently feel that they had been helped by these products and continue to buy them? Some of them could provide relief for symptoms such as headache, constipation and cough. And no doubt some people felt better, regardless of their problems, after dosing themselves with alcohol or opium-containing patent medicines.

The healing power of nature cannot be underestimated. Most illnesses are self-limiting, and people tend to recover even if they do nothing. Individuals taking patent medicines however, often were tempted to attribute the cure to the remedy. Even in the case of more serious illnesses which were not so likely to heal themselves, patients experiencing a temporary improvement assumed that they had been cured and willingly attributed their miraculous recovery to a patent medicine.

The placebo effect must also be considered. In recent years medical and social scientists have begun to realize the significance of psychological factors in illness. Patients who believe they are receiving an effective medication may actually improve even if the "drug" involved is an inert preparation. So it follows that nineteenth-century patients who believed they would be cured by a particular patent medicine actually may have received some benefit from that product. Furthermore, it is important to remember that many people using patent medicines were not actually suffering from dread diseases, especially if they had diagnosed themselves as a result of reading patent medicine advertisements.

Finally, some people really suffering serious illnesses turned to patent medicines out of desperation because medical science could



Examples of patent medicines containing narcotics such as morphine. (Photo courtesy of The Pearson Museum)

do little to cure their disease. Although this situation still is true today, it was even more a fact of nineteenth-century life when medicine had much less to offer the seriously ill. The extravagant claims of the patent medicine makers frequently were accepted because people wanted so badly to believe them.³⁷

Didn't anyone speak out against the abuses of the patent medicine trade in nineteenth-century America? Of course there were protesters, but these few were not able to mount an effective campaign for reform. The policy of "laissez-faire" economics, with its emphasis on maximum freedom for private enterprise and

minimal governmental regulation, helped to protect patent medicine sellers from serious interference in their business. *Caveat emptor* ("let the buyer beware") was the rule of the day.

Newspapers were reluctant to criticize patent medicines because their survival depended so heavily on advertising revenues derived from these products. Advertising contracts that patent medicine manufacturers signed with newspapers generally contained a clause indicating that the contract would be voided if the newspaper printed anything detrimental to the manufacturer's interest. In fact, many contracts went beyond that and included the "red clause" (so called because it was printed in red ink so that it would stand out). This clause stated that the advertising contract would be cancelled if the federal government or the government of the state in which the newspaper was located passed any law restricting or interfering with the sale of proprietary medicines. In this way, newspapers were pressured to campaign against laws that would regulate the patent medicine trade.³⁸

Those who might have been expected to take the lead in pressing for reform—that is, physicians and pharmacists—did not present a united front. Many physicians prescribed patent medicines for their patients, and medical journals commonly accepted advertisements for these products. Pharmacists derived a great deal of income from the sale of patent medicines.³⁹

Actually, physicians and pharmacists sometimes blamed each other for the evils of the patent medicine trade. Some physicians argued that pharmacists should refuse to stock and sell patent medicines. Pharmacists countered that it was the large number of unqualified, incompetent medical practitioners who influenced people to turn to patent medicines.⁴⁰ One prominent pharmacist commented that:

The pharmacist, as far as the nostrum traffic is concerned, is but a merchant; he occupies a neutral ground, and cannot if he would, regulate it.... If pharmacists should drop the nostrum [patent medicine] traffic, as unwisely insisted upon by some medical journals, or should deliberately deliver to other branches of trade the sale of natural or artificial mineral waters, the keeping of homeopathic pellets or other articles which by long usage have been associated with the drug trade as it has developed, outside of pharmacy proper, and if perhaps, against the preference and interests of the pharmacist, the result would certainly not be a decrease in the demand for nostrums, mineral waters,



Frank M. O'Neill's "Twelve Extracts Compound," a laxative and diuretic manufactured in Muncie, Indiana. (Photo courtesy of The Pearson Museum)



 $\label{thm:continuous} The \ manufacturers \ of \ patent \ medicines \ helped \ to \ popularize \ sugar-coated \ pills. \\ (Photo \ courtesy \ of \ The \ Pearson \ Museum)$

sugar pellets, fancy medicines, including elixirs, tonics, medicated candies, etc.—their sale would only pass into less qualified hands. The nostrums and kindred specialties would pass from the show-windows and shelves of the drug stores to those of the grocer, fancy-dealer, confectionary store, etc. . . . 41

There was, however, some opposition to patent medicines on the part of organized medicine and pharmacy in the nineteenth century. One of the original objectives of the American Pharmaceutical Association, when it was founded in 1852, was to investigate patent medicines. Although a committee was set up for this purpose, association members were divided over what steps should be taken. Their internal dissention hindered effective action. The American Medical Association passed several resolutions concerning patent medicines, but its own journal continued to accept advertisements for such products until the beginning of the twentieth century. 42

Attempts at reform during this period were directed largely towards the question of secrecy of ingredients. Optimistically, reformers often assumed that consumers would refuse to buy quack medicines if they became aware of the actual ingredients. One physician commented: "Let but the composition of secret remedies be once known to the community and the death knell to empiricism will have sounded." Legislation to require the listing of ingredients, however, was not enacted by any government body in the United States until the legislature of North Dakota enacted a limited formula disclosure act early in the twentieth century. 44

After the turn of the century, criticism of patent medicines became more vociferous. A spirit of "progressive reform" was sweeping the land, and "muckraking" journalists exposed corrupt and illegal practices in government and business. The patent medicine trade did not escape the notice of these reformers. Edward Bok, editor of the *Ladies' Home Journal*, was one of the leading critics of patent medicines. As early as 1892 the *Journal* had begun refusing advertisements for such products, but it was not until 1904 that Bok began a vigorous campaign against patent medicines. ⁴⁵

With the aid of reporter Mark Sullivan, Bok began to compile the evidence that he needed. One example of the exposes that Bok published is the pictorial feature entitled "Pictures that Tell Their Own Story," which appeared in the September 1905 issue of the Journal. It was a brief but effective piece of journalism. Bok reproduced, for example, a testimonial from a Peruna advertisement signed by a former North Carolina Congressman,

along with a letter from the gentleman in question stating that the testimonial was "an absolute falsehood and forgery." There was also a picture of several alcohol lamps burning brightly through the use of certain patent medicines as fuel (demonstrating the high alcohol content of these products). A 1905 advertisement for Lydia Pinkham's Vegetable Compound, suggesting that women write to Mrs. Pinkham for medical advice, was also reproduced; next to this reproduction appeared a photograph of Lydia Pinkham's tombstone, giving her year of death as 1883.⁴⁶

Perhaps the most influential publication in arousing public sentiment against patent medicines, however, was the series of articles entitled "The Great American Fraud," which appeared in *Collier's* in the fall of 1905.⁴⁷ In these six articles, journalist Samuel Hopkins Adams presented, with biting wit and abundant evidence, a devastating critique of the patent medicine business. In the first article of the series, Adams complained:

"Don't make the mistake of lumping all proprietary medicines in one indiscriminate denunciation," came warning from all sides when this series was announced. But the honest attempt to separate the sheep from the goats develops a lamentable lack of qualified candidates for the sheepfold.⁴⁸

The third article of the series dealt with Liquozone, a product that was mostly water with a little sulfuric and sulfurous acids, but advertised by the manufacturer to be liquid oxygen. Liquozone supposedly was a germicide that cured a host of illnesses, including tuberculosis, cancer and malaria. The following excerpt illustrates Adams' colorful and forceful style:

Liquid oxygen doesn't exist above a temperature of 229 degrees below zero. One spoonful would freeze a man's tongue, teeth and throat to equal solidity before he ever had time to swallow. If he could, by any miracle manage to get it down, the undertaker would have to put him on the stove to thaw him out sufficiently for a respectable burial. Unquestionably Liquozone, if it were liquid oxygen, would kill germs, but that wouldn't do the owner of the germs much good because he'd be dead before they had time to realize that the temperature was falling.⁴⁹

The American Medical Association also began to take a more active role in the campaign against patent medicine quackery after the turn of the twentieth century. In 1905, the American Medical Association established the Council on Pharmacy and Chemistry,



 $Calendars\ were\ another\ popular\ medium\ for\ the\ advertising\ of\ patent\ medicines.$ $(Photo\ courtesy\ of\ National\ Library\ of\ Medicine)$

whose task it was to evaluate proprietary medicines advertised to physicians and publish reports about them. This council also determined which of these products would be acceptable for advertising in the association's *Journal*. A year later, the association set up its chemical laboratory mainly to run analyses of drug products in connection with the work of the council. Arthur Cramp joined the staff of the *Journal* that same year, and he soon began an active campaign directed against patent medicines quackery in general. ⁵⁰

Harvey Wiley, Chief of the Bureau of Chemistry of the United States Department of Agriculture and a leader in the fight for a federal pure food and drug law, also began to take more interest in the patent medicine question at about this time. Although Wiley's chief concern was food adulteration, in a 1903 address delivered at a meeting of physicians and surgeons held in Washington, D.C., he declared that any national food and drug law that was passed should include provisions regulating patent medicines. One of his main arguments was that no remedy should be sold which did not have its formula printed on the label. ⁵¹

Pure food or pure food and drug bills had been introduced into the United State Congress since 1879, but a sustained drive for such a bill had begun only in 1891. Patent medicines generally had been excluded from such bills before 1903. Once patent medicines began to be included in proposed legislation, the Proprietary Association of America—which had been founded in 1881 to protect the interests of patent medicine manufacturers—opposed or sought to weaken any food and drug bills introduced into the Congress. 52

Nevertheless, the numerous exposes led to increased public pressure for passage of a pure food and drug bill. The publication in 1906 of Upton Sinclair's novel, *The Jungle*—which described the fraud and adulteration that took place in the meat packing industry—was perhaps the final straw arousing public concern to the point where the Congress finally acted. On June 30, 1906, President Theodore Roosevelt signed the Pure Food and Drugs Act into law.

The 1906 Act contained certain provisions that related specifically to the patent medicine question. For one thing, drugs were defined not just as those "official" substances described in the *United States Pharmacopoeia* and the *National Formulary*, but as "any substance or mixture of substances intended to be used for the cure, mitigation, or prevention of disease of either man or other animals." This broad definition obviously brought patent medicines



 $\label{lem:Lydia E. Pinkham's Vegetable Compound was a favorite remedy for health problems of women. (Photo courtesy of The Pearson Museum)$



 $British\ patent\ medicines,\ such\ as\ Godfrey's\ Cordial,\ achieved\ widespread\ popularity\ in\ the\ American\ colonies.\ (Photo\ courtesy\ of\ The\ Pearson\ Museum)$

within the scope of the law. These medicines were considered to be adulterated if they fell below the standard of quality professed on the label. In addition, a medicine would be considered misbranded if the package or label contained any statement that was false or misleading concerning the product or its ingredients. The manufacturer was not required to disclose all of the ingredients of a remedy, but if any one of eleven named substances (including alcohol and opium) was included in the product, its presence and amount did have to be indicated on the label.⁵³

The law was not as strict as its most ardent supporters had hoped it would be, but it represented an important step forward. Henceforth the federal government was to be actively involved in the regulation of food and drugs.

One glaring weakness with respect to patent medicines soon became evident. In 1911 the Supreme Court ruled that the law's prohibition of false and misleading statements did not extend to therapeutic claims. Congress quickly acted to correct that fault by passing the Sherley Amendment in 1912. This amendment to the 1906 Act declared a product misbranded if the label made false and fraudulent claims regarding its therapeutic or curative effects. Unfortunately, this meant that the government had to prove that such claims not only were false, but also fraudulent (that is, that the manufacturer had lied knowingly). Thus, prosecution of products on the basis of their therapeutic claims became a difficult task except in the case of the most blatant frauds.⁵⁴

Penalties provided under the law were also not very severe. The first case tried under the 1906 Act illustrates this point. This particular case involved a headache remedy known as Cuforhedake Brane-Fude, which was manufactured by a District of Columbia pharmacist named Robert Harper. (Unfortunately, an occasional pharmacist or physician became the proprietor of a quack remedy.) Government officials were concerned about the acetanalid content of the product, and also felt it was misbranded. Harper eventually was convicted of misbranding, largely on the basis of his use of the term *Brane-Fude*, which implied that the product provided special nourishment for the brain. Although he was fined \$700, Harper was still well ahead because the sales of the product had already brought him two million dollars.⁵⁵

The 1906 Act by no means ended the problem of patent medicine quackery. Since that time further legislation—such as the 1938 Food, Drug and Cosmetic Act and the 1962 Drug Amendments—has eliminated some of the weaknesses of earlier laws and greatly expanded the powers of the federal government in areas of

food and drug regulation. Yet health quackery remains a big business in America today. One estimate of the mid-1960s was that over two billion dollars a year was being spent on medical quackery. ⁵⁶ Quackery in the health field obviously is still very much with us, and probably always will be. Oliver Wendell Holmes once stated that "quackery and idolatry are all but immortal." ⁵⁷

It would be foolish to deny, however, that government regulation has brought about improvements in the field of self-medication products. The more dangerous of these products (those containing large quantities of narcotics, for example) have been eliminated from the market. The advertisements for more popular patent medicines today are not nearly so bold or outrageous in their claims as those of their predecessors. But blatant quackery in the promotion of patent medicines has by no means totally disappeared from the American scene. Witness, for example, the United States Postal Service's actions in 1980 against a product advertised for the treatment of chronic rheumatism, dropsy, nervous afflictions, spasms, cramps, ulcers and diseases of the throat and against an herb preparation that supposedly extended the capabilities of the mind (perhaps another "Brane-Fude"). 59

In addition to such obvious quackery, other more subtle forms of misleading representation sometimes are encountered in the promotion of patent medicines: unsubstantiated claims that one particular product is superior to others; clever innuendos that a product contains some new secret ingredient; undocumented assurances that doctors prefer one product to similar remedies, etc. As Kenneth Milstead, an FDA official, pointed out in 1963:

When any untrue or misleading statement is deliberately, fraudulently or pretentiously made for a food, drug, device or cosmetic, this is quackery.... And, it matters not whether the article is harmless or whether it gives psychosomatic relief; whether it is cheap or whether it has value for other purposes; whether it is produced by an obscure firm or whether it is produced by a "reputable" firm—the promotion of it is still quackery. 60

It should be noted that space permits here only a relatively brief overview of this complex subject. The reader interested in further information on the topic is referred to the works cited in the notes. Particularly valuable are the writings of James Harvey Young, and the author wishes to acknowledge his indebtedness to these studies in preparing the present essay.



 $\label{lem:patriotic symbols, such as Uncle Sam, were frequently used to promote patent medicines.} (Photo courtesy of The Pearson Museum)$



NOTES

- 1. H. G. Wells, *Tono-Bungay* (New York: Modern Library, n.d.), p. 133.
- 2. James Harvey Young, The Toadstool Millionaires: A Social History of Patent Medicines in America Before Federal Regulation (Princeton, NJ: Princeton University Press, 1961), p. 109.
- 3. On English patent medicines, see Leslie Matthews, History of Pharmacy in Britain (Edinburgh: E. and S. Livingstone, 1962), pp. 282-295; George Griffenhagen and James Harvey Young, "Old English Patent Medicines in America," Contribution from the Museum of History and Technology, United States National Museum Bulletin 218 (Washington D.C.: Smithsonian Institution, 1959), pp. 155-183; "Proprietaries of Other Days," Chemist and Druggist 106 (1927):831-840.
- 4. On English patent medicines in America, see Griffenhagen and Young, "Old English Patent Medicines" and Young, *Toadstool Millionaires*, pp. 3-15.
- 5. Young, Toadstool Millionaires, pp. 21-30; Stewart Holbrook, The Golden Age of Quackery (New York: Collier Books, 1962), pp. 40-42.
 - 6. Young, Toadstool Millionaires, pp. 32-33.
 - 7. *Ibid.*, pp. 31-57.
 - 8. *Ibid.*, p. 41.
 - 9. Ibid., pp. 88, 104.
- 10. For a general discussion of the advertising methods used, see *ibid.*, pp. 93-124, 165-189. Many patent medicine advertisements have been reproduced in Gerald Carson, One for a Man, Two for a Horse: A Pictorial History, Grave and Comic, of Patent Medicines (Garden City, NY: Doubleday, 1961) and Adelaide Hechtlinger, The Great Patent Medicine Era: Or, Without Benefit of Doctor (New York: Madison Square Press, 1970.)
- 11. The best work on medicine shows, and one on which I have drawn heavily for information on the subject for the purposes of this essay, is Brooks McNamara, *Step Right Up* (Garden City, New York: Doubleday, 1976). See also Young, *Toadstool Millionaires*, pp. 190-202 and Holbrook, *Golden Age*, pp. 181-207.

- 12. Early American records show that before the Revolutionary War, performing quacks had become sufficiently numerous that at least two colonies enacted legislation banning their activities. See McNamara, *Step Right Up*, pp. 7-8.
 - 13. On the Clifton Remedy Company, see *ibid.*, pp. 59-60.
- 14. On the Hamlin shows, see *ibid.*, pp. 65-67 and George Bushnell, "Chicago's Miraculous Patent Medicines," *Chicago History* 3 (1974):78-87, especially pp. 79-82.
- 15. On the Kickapoo shows, see McNamara, *Step Right Up*, pp. 79-103 and Holbrook, *Golden Age*, pp. 201-207. The anecdote by Sandburg is cited in McNamara, p. 96.
- 16. For a discussion of the psychology of patent medicine promotion, see Young, *Toadstool Millionaires*, pp. 165-189.
- 17. This advertisement is reproduced in Carson, *One for a Man*, p. 91.
 - 18. Holbrook, Golden Age, pp. 73-75.
- 19. This advertisement is reproduced in Young, *Toadstool Millionaires*, plate 14.
- 20. See Merriley Borell, "Brown-Sequard's Organotherapy and Its Appearance in America at the end of the Nineteenth Century," *Bulletin of the History of Medicine* 50 (1976):309-320.
 - 21. Holbrook, Golden Age, pp. 75-77; Carson, One for a Man, p. 33.
- 22. Carson, One for a Man, pp. 51-52, 100, 118; Young, Toadstool Millionaires, p. 185. The Ex-Lax advertisement is quoted from Young.
 - 23. Young, Toadstool Millionaires, pp. 173-176.
- 24. Ibid., pp. 176-179; McNamara, Step Right Up, pp. 79-90; Robert Shaw, History of the Comstock Patent Medicine Business and Dr. Morse's Indian Root Pills (Washington, D.C.: Smithsonian Institution Press, 1972).
- 25. Quoted from Sydney Hillier, *Popular Drugs: Their Use and Abuse* (London: T. Werner Laurie, n.d.), pp. 169-170.
- 26. On testimonials, see Holbrook, Golden Age, pp. 231-248; Young, Toadstool Millionaires, pp. 187-189; Carson, One for a Man, pp. 117-118.
- 27. This advertisement is reproduced in Carson, *One for a Man*, p. 101.
- 28. Examples of the money-back or reward type advertisements may be found in *One for a Man*, (e.g., pp. 11, 17) and Hechtlinger, *Patent Medicine Era* (e.g., pp. 197, 228). The advertisement for Dr. King's New Discovery is reproduced in the former, p. 113.
- 29. The discussion of alcohol in patent medicines is based on Young, *Toadstool Millionaires*, pp. 125-143; Holbrook, *Golden Age*, pp. 154-162; Carson, *One for a Man*, pp. 42-47; and Samuel Hopkins Adams, "Peruna and the 'Bracers'," *Collier's*, Oct. 28, 1905, pp. 17-19. I have seen the alcohol content of Hostetter's Bitters reported as anywhere between 32 percent and 47 percent in various

sources, and it may well have varied over time.

- 30. Andrew Sinclair, *Prohibition: The Era of Excess* (New York: Harper and Row, 1962), p. 407.
- 31. On opiates in patent medicines for children, see Elizabeth Lomax, "The Uses and Abuses of Opiates in Nineteenth-Century England," Bulletin of the History of Medicine 47(1973):167-176; Virginia Berridge, "Opium Over the Counter in Nineteenth Century England," Pharmacy in History 20(1978):91-100; and James Harvey Young, "Even to a Sucking Infant': Nostrums and Children," Transactions and Studies of the College of Physicians of Philadelphia, series 5, 1 (1979):5-32, especially pp. 21-31.
- 32. A good review of narcotics in patent medicines is Lyman Kebler, *Habit Forming Agents: Their Indiscriminate Sale and Use, a Menace to the Public Welfare* (Washington, D.C.: Government Printing Office, 1910).
- 33. Samuel Hopkins Adams, "The Subtle Poisons," *Collier's*, Dec. 2, 1905, pp. 16-18. See also William Fiedler, "Antikamnia: The Story of a Pseudoethical Proprietary," *Pharmacy in History* 21 (1979):59-72.
- 34. Charles Oleson, Secret Nostrums and Systems of Medicine: A Book of Formulas, tenth edition (Chicago: Oleson, 1903), p. 141; Young, Toadstool Millionaires, p. 148.
- 35. For formulas giving the composition of many patent medicines, see Oleson, Secret Nostrums and John Street, The Composition of Certain Patent and Proprietary Medicines (Chicago: American Medical Association, 1917).
 - 36. Young, Toadstool Millionaires, p. 110.
- 37. For another discussion of some of the factors accounting for the popularity of patent medicines, see James Harvey Young, "The Persistence of Medical Quackery in America," *American Scientist* 60 (1972):318-326.
- 38. "The Patent Medicine Conspiracy Against the Freedom of the Press," *Collier's*, Nov. 4, 1905, pp. 13-16, 25.
- 39. See David Dykstra, "The Medical Profession and Patent and Proprietary Medicines During the Nineteenth Century," *Bulletin of the History of Medicine* 24 (1955):401-419.
- 40. See, for example, Frederick Hoffman, *The Relations of Pharmacists, Physicians and Nostrums* (Philadelphia: Merrihew and Son, 1876).
 - 41. Ibid., pp. 4-5.
- 42. Dykstra, "Medical Profession;" Young, Toadstool Millionaires, pp. 207-209.
 - 43. Quoted from Young, Toadstool Millionaires, p. 73.
 - 44. "Patent Medicine Conspiracy," p. 25.
 - 45. Young, Toadstool Millionaires, pp. 212-214.
- 46. Edward Bok, "Pictures that Tell Their Own Story," Ladies' Home Journal, Sept. 1905, p. 15.

- 47. The series appeared in the following issues of *Collier's* for 1905-1906: Oct. 7; Oct. 28; Nov. 18; Dec. 2; Jan. 13; Feb. 17. It was reprinted as a booklet under the series title, "The Great American Fraud," by the American Medical Association in 1906.
- 48. Samuel Hopkins Adams, "The Great American Fraud," Collier's, Oct. 7, 1905, p. 14.
- 49. Samuel Hopkins Adams, "Liquozone," Collier's, Nov. 18, 1905, p. 20.
- 50. James Harvey Young, The Medical Messiahs: A Social History of Health Quackery in Twentieth Century America (Princeton, NJ: Princeton University Press, 1967), pp. 129-143.
 - 51. Young, Toadstool Millionaires, p. 226.
 - 52. Ibid., pp. 226-244.
- 53. A copy of the 1906 Act may be found in Thomas Christopher, Cases and Materials on Food and Drug Laws: A Study in Consumer Legislation (Chicago: Commerce Clearing House, 1966), pp. 795-799.
- 54. On the Sherley Amendment, see Young, *Medical Messiahs*, pp. 47-50.
 - 55. *Ibid.*, pp. 3-12.
 - 56. *Ibid.*, p. vii.
- 57. Quoted from James Harvey Young, "A Quota of Quotations on Quackery," *Bulletin of the New York Academy of Medicine*, second series, 51 (1975):881.
- 58. For an evaluation of the patent medicine scene in the 1970s, see James Harvey Young, *American Self-Dosage Medicines: An Historical Perspective* (Lawrence, Kansas: Coronado Press, 1974), pp. 33-61.
- 59. FDA Consumer, Feb. 1981, p. 42; FDA Consumer, Sept. 1981, p. 37.
- 60. K. L. Milstead, "Enforcement of Antiquackery Laws," Journal of the American Pharmaceutical Association, new series, 3 (1963):458.





AUTHOR

John Parascandola, a native of New York City, received his B.S. degree in Chemistry from Brooklyn College. He then undertook graduate studies at the University of Wisconsin-Madison, where he earned an M.S. in Biochemistry and a Ph.D. in the History of Science. After spending a postdoctoral year as a Macy Fellow for the History of Medicine and Biological Sciences at Harvard University, he returned to Madison in the fall of 1969 to join the faculty of the University of Wisconsin. Professor of History of Pharmacy and History of Science, Dr. Parascandola also served as Director of the American Institute for the History of Pharmacy from 1973 to 1982. He assumed his present position as Chief of the History of Medicine Division, National Library of Medicine in Bethesda, Maryland in August of 1983.

Dr. Parascandola's research interests have focused on the history of modern biomedical science, especially pharmacology, chemotherapy and biochemistry. He is the co-author (with Elizabeth Keeney) of Sources in the History of American Pharmacology (Madison: American Institute of the History of Pharmacy, 1983), the editor or co-editor of four books and booklets, and the author of numerous historical papers in professional journals. In 1980 he received the Edward Kremers Award for distinguished pharmacohistorical writing by an American. Dr. Parascandola has served in various capacities as an officer or committee member for several national and international organizations in the history of pharmacy or history of medicine.







FROM THE SERIES EDITOR

Caduceus is published for both a special and general readership—those individuals who wish to be better informed about the heritage of healing and the status of the health sciences today. The journal is written by scholars who interpret that heritage through the artifacts of health science museums, archives and special library collections. It is their task to construct the stories which can inform us all about the continuities of today with the past and the future.

Most of the health science museums and special library collections are small and some are very new. Especially since the exuberant celebrations and subsequent national pride engendered by the Bicentennial of the Republic, public-spirited citizens have become even more conscious of the urgent need to preserve the artifacts of history, and more importantly, the stories for which those artifacts are but symbols. The very fact that it was considered necessary to create the Commission on Museums for a New Century is indicative of this renewed interest in preservation. The relevance of museums and other institutions dedicated to the preservation and interpretation of artifacts is made clear from this statement from the Commission's report:

Museums represent certainty in uncertain times. As contemporary life grows more impersonal, people need to be reminded that there is a continuity to human existence and the natural and physical world, and they need a way to connect their own experience to what is known about the past and the present.

Our times are uncertain. The changes that health science technology have made available to mankind in the last fifty years are without precedent. It the same way, these changes have altered irrevocably how we understand health and the healing process. It has become the special task of historians, anthropologists, sociologists, and other cultural analysts to explain these

developments to both the health science professionals and the general public and draw attention to the cultural uncertainties and ethical questions they raise. By providing a special journal which focuses on the interpretation of artifacts and ideas, we hope that scholars will be encouraged to pay more and better attention to the unique data available in our health science museums, archives and special library collections.

The unique commitments which museums and other information centers represent—collection, preservation, and learning from artifacts and ideas of the past—are values of our heritage. In the stories they tell through exhibition of artifacts, the repositories of the past provide an important means for us all to compare how we were cared for as children with how we receive care today. More importantly, though, they help us set in contemporary contexts the issues of choice about health care which confront us today.

The caduceus is the ancient symbol of healing used in some form by all of the health professions to relate a history of healing. This quarterly hopefully will provide one means for museums and libraries to better relate the stories of healing and healers. Decisions concerning health promotion, illness and adequate health care, as well as available options, must be weighed as conscientiously as possible.

Most issues of *Caduceus* will be monographs—only one essay. By providing authors greater space than most journals, we hope that the stories behind the changes in health care can be told more completely and be illustrated more amply. Most of the health science museums are too small to provide a catalog by which to explain their exhibits. Some issues of the quarterly will be based on exhibitions at a specific museum or collection. Few people understand all of the work and resources preservation requires. Some issues will feature technical essays about the collecting, conserving and exhibiting of artifacts, but only in so far as those essays inform a readership more all encompassing than museum personnel concerning the nature of repositories and their place as part of our heritage.

Caduceus is published to assist with the educational and interpretative mission of the health science museums and special library collections. Members of the Editorial Board and the Board of Advisors are most receptive to reviewing unsolicited manuscripts and to receiving opinions and suggestions from the readers. Each issue will have space for notices of collecting needs, meetings, personnel changes, exhibition openings, and items for loan, exchange or sale.

The task of interpretation trains us to attend not only to what objects, institutions, practices, images, utterances, events or customs—all the usual objects of academic interest—have been part of our heritage, but to plumb their functions and meanings. If *Caduceus* can provide a means for scholars of the health sciences to better interpret the changes in our personal and social context through the repositories of artifacts and ideas, both professionals and the public will be better served. Then the efforts of launching this new quarterly will be well justified.





INSTRUCTIONS TO CONTRIBUTORS

Editorial Policy: Papers will be considered for publication on the condition that they are submitted solely to Caduceus. Manuscripts of regional or national interest on topics pertinent to the history of medicine and the development of health care will be considered. Appropriate manuscripts will be judged by at least two reviewers before a decision is taken on their acceptance. When a particular manuscript is accepted for publication, the author will be required to sign an agreement transferring copyright to the Board of Trustees of Southern Illinois University. No published material may be reproduced elsewhere without the written permission of the publisher and the author.

Interested authors should submit manuscripts in duplicate and address all correspondence to the Series Editor: Glen W. Davidson, Ph.D., Chairman, Department of Medical Humanities, Southern Illinois University School of Medicine, P.O. Box 3926, Springfield, Illinois, 62708.

Preparation of Manuscripts: All manuscripts submitted must be typed doublespaced throughout, including references, tables and footnotes. Margins should be $1\frac{1}{2}$ inches all around—top, bottom, left- and right-hand margins. All pages of text should be numbered consecutively, beginning with 1.

Title Page: The title page should be on a separate piece of paper, and should carry the title of the manuscript, the name(s) of the author(s), and the affiliation of the author(s).

Text: Manuscripts should be limited to between 60-80 pages, typescript doublespaced. Conformity to the *Quarterly* guidelines listed below is expected; any deviations must be discussed with the Series Editor prior to submission of the manuscript.

- Matters of style. For mechanics of style, manuscripts are expected to conform to A Manual of Style, Thirteenth Edition (Chicago: University of Chicago Press, 1982). For spelling authors should use Webster's Third New International Dictionary of the English Language, Unabridged (Springfield, MA: G & C. Merriam Co., 1969).
- Typing Reminders: Manuscripts should have three-space paragraph indentation, not block paragraphs. The use of subheads is encouraged, and those used should be centered on the page, typed in capitals and lowercase. Block quotations should be typed doublespaced, indented on the left and the right margins, with three spaces above and below. Less than seven full lines of typed quotations should be run into the, text and enclosed in quotation marks. Underline only words which should appear in italics.
- Back Matter. Notes should be typed doublespaced on sheets separate from the text numbered consecutively with Arabic numerals. Bibliographies should be typed doublespaced on sheets separate from the text, in alphabetical order by authors' last names. Each item should begin flush left, with runover lines indented three spaces, and triple spaces between items.

(Authors who have not published before are reminded that the correct form of footnotes is different from that of bibliographies.)

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- Illustrations: Photographs, maps, charts and figures are to be provided by the author. Ideally, photographs should be bright, sharp, 5" x 7" or 8" by 10" black-and-white glossy prints. Each illustration should be identified by affixing on the back a gummed label on which is typed: the number of the illustration, title of the manuscript, and the first few words of the legend for positive identification. An arrow should indicate the top of the illustration.
- Legends. The legends for illustrative material should be typed on a separate sheet of paper at the end of the text. Any abbreviations that appear on figures should be explained on this page. If any illustrations are photographs of copyrighted artistic material, the author is requested to include the institution or individual from whom permission to reproduce has been obtained, as well as all pertinent material required in the credit statement.





ANNOUNCEMENTS



AMERICAN ASSOCIATION FOR THE HISTORY OF MEDICINE ANNOUNCES ANNUAL MEETING

The 58th annual meeting of the Association will take place in Durham and Chapel Hill, North Carolina, May 15 to 18, 1985. The American Osler Society, the Association of Librarians in the History of the Health Sciences, and an ad hoc group to explore the prospect of founding an association of health science museums will also be convening during the same week. Forty-four papers have been accepted for the AAHM program, in addition to luncheon workshops and showing of recent films in medical history. The program will open with a reception and viewing of a small exhibition of art works relating to medical history in the Duke University Art Museum. Local libraries will prepare medical exhibits for the occasion and a large exhibit on the "History of the Human Brain" will be on loan from the Brain Research Institute of UCLA. Program and registration material is available from G.S.T. Cavanagh, Local Arrangements Chairman, Duke University Medical Center Library, Durham, NC 27710.

ASSOCIATION OF HEALTH SCIENCES HISTORY MUSEUMS TO BE FORMED

Plans are being made for an American association of health sciences history museums, and an organizational meeting will be held in May during the annual meeting of the American Association of the History of Medicine in Durham, North Carolina. Patsy Gerstner and James Edmonson of the Howard Dittrick Museum of Historical Medicine in Cleveland are the principal organizers. They have contacted staff at about 60 museums or organizations with museum collections and have received enthusiastic response. If you are interested in the association but have not heard from them, please contact either one by writing to the Dittrick Museum, 11000 Euclid Avenue, Cleveland, Ohio 44106 or by calling (216)368-3648.



THE PEARSON MUSEUM ANNOUNCES NEW CURATOR

The Department of Medical Humanities at Southern Illinois University School of Medicine announces the hiring of Lisa M. Dziabis as the new Curator for The Pearson Museum. A graduate of Indiana University in Bloomington, Ms. Dziabis has her master's degree in Classical Archeology and recently was a practicum student at the William Hammond Mathers Museum in the university's Department of Anthropology/Folklore/History. Ms. Dziabis replaces Gordon Peckham, founding Curator, who retired in September, 1983 and now resides in Prairie du Chien, Wisconsin.

ST. LOUIS MEDICAL SOCIETY MUSEUM ANNOUNCES MERGER

The St. Louis Medical Society Museum announces its merger with the St. Louis Science Center, formerly the Museum of Science and Natural History. The Medical Society Museum is in the process of relocation, pending reopening as part of a major exhibit on medical technology to be developed at the Science Center. Inquiries may be addressed to Mary P. Coxe, Assistant Curator for Medical Technology, The St. Louis Science Center, 5050 Oakland, St. Louis, MO 63110.



CLEVELAND HEALTH EDUCATION MUSEUM LECTURE SERIES

"Living Longer, Living Better: A Practical Health Care Lecture Series for Consumers" is the title of the five-part lecture series on a variety of preventative and self-care topics offered by the Cleveland Health Education Museum. The February 17 lecture was "Eating Right, Keeping Fit" and the panel participants were Dr. Thomas W. Moir, Director, Exercise Laboratory, University Hospitals of Cleveland and Lucille Anderson, MS, Assistant Professor, Dietetic Technology, Cuyahoga Community College. The moderator was Dr. John D. Budd, Chief Medical Consultant, Blue Cross/Blue Shield of Northern Ohio. The March 17 lecture is "Stress Control in Daily Living." The guest speaker is Dr. Michael McKee, Head of the Biofeedback Section, Department of Psychology, Cleveland Clinic Foundation. The moderator is Dr. George P. Leicht, President, Board of Trustees, Cleveland Health Education Museum.

NATIONAL MUSEUM OF AMERICAN HISTORY MEDICAL SCIENCES MISCELLANY

As part of the Visiting Nurse Associations exhibit (see Exhibits) scheduled this month, Medical Sciences Curator Audrey Davis writes that a special day of events at the Museum is planned for March 30, 1985. Plans include some visiting nurses from the D.C. area demonstrating their skills, a showing of a 1930 film on the Frontier Nursing Service and a slide lecture on the history of the visiting nurse associations across the U. S. Dr. Davis also announces the appointment of Mark Dreyfuss to the staff as Museum Technician. Mr. Dreyfuss assists with collections and an upcoming cardiology exhibit, among other duties.

Lastly, the Division of Medical Sciences is looking for items (toys, instruments, etc.) which relate to children's play objects, health needs, and instructional materials. Please contact Audrey Davis, Curator, Division of Medical Sciences at the National Museum of American History, Smithsonian Institution, Washington, D.C., 20560.





EXHIBITS



CURRENT EXHIBITS

Visiting Nurse Associations 1885-1985

The Division of Medical Sciences of the National Museum of American History is currently running an exhibit heralding the role of visiting nurse associations in the last hundred years. Items include Mary Breckinridge's saddlebags which she used in the 1930s on her rounds in Kentucky with the Frontier Nursing Service (which she founded in 1925); a doll dressed in the uniform of the 1898 Buffalo Visiting Nurse: a button of 1908 for tag day, a novel method of asking people in the Buffalo community to contribute to the VNA; a number of pictures of nurses on the job, a modern visiting nurse uniform and bag, etc. The Wash. D.C. VNA is celebrating its 85th anniversary and will be represented. This exhibit runs March 1 — April 30, 1985. Contact Audrey Davis, Curator, Division of Medical Sciences at the National Museum of American History for details.

ONGOING EXHIBITS

Cardiovascular Fitness

"Cardiovascular Fitness," an ongoing multi-media exhibit showing at the Cleveland Health Education Museum, consists of a four-foot replica of the heart showing both valves and chambers; an actual heart specimen; a "lifecycle" whereby visitors can test the results of increased activity on their own cardiovascular system; display panels focusing on the functions of the heart; factors that affect the heart positively and negatively; and preventive measures to lower the risk of a heart attack or stroke. An animated film describing the heart and showing it in action is featured. "Risko," a game about changing factors that can affect performance and endurance of the heart, is also part of the exhibit.

At the Cleveland Health Education Museum. Call (216)231-5010 for more information.



PAST EXHIBITS

Egyptian Burial Rituals

"The Egyptian Mummy: Secrets and Science." This exhibit at the Cleveland Health Education Museum showed Feb. 1—Feb 10, 1985. Highlighted were the rites, rituals and customs of ancient Egypt, including a variety of artifacts from magical amulets to an Egyptian bronze containing a falcon mummy, along with the story of how the mummy was discovered through x-rays. An ancient mummy named Djed-Iwef-Ankh was on display. Also included were a hieroglyphics interpretation center and research displays depicting medical studies of three mummies from the University of Pennsylvania Museum's collection.

The Pearson Museum Monograph Series

The Pearson Museum Monograph Series is an illustrated publication for medical students, busy members of the health profession and members of the general public. Each issue is approximately 24 pages long and addresses topics in medical history, health care in history and culture, and the arts in medicine. Initiated in 1981 by the Department of Medical Humanities at Southern Illinois University School of Medicine, the Series consists of the following titles:

Physician to the West: Daniel Drake and the American Frontier, by Estelle Brodman (SN 81/1)

David Prince: A Pioneer in Surgical Therapeutics in Central Illinois, by Frank Norbury (SN 81/2)

William Beaumont: Frontier Army Surgeon and Physiologist, by Ephraim Fischoff (SN 81/3)

Elizabeth Blackwell: First Woman M.D., by Ephraim Fischoff (SN 81/4)

"The Milk Sick:" A Disease of the Midwest, by George T. Weber (SN 82,1)

Oliver Wendell Holmes: Physician and Humanist, by Ephraim Fischoff (SN 82/2)

Greene Vardiman Black: Father of Modern Dentistry, by B. W. Gilbert (SN 82/3)

Jacksonville State Hospital: The First Psychiatric Institution in Illinois, by Miroslav Velek (SN 82/4) William Osler: Physician and Teacher, by Ephraim Fischoff (SN 83/1)

Margaret Shutt: Tribute to a Forgotten Physician, by Floyd S. Barringer (SN 83/2)

The Community Mental Health Movement in Springfield, Illinois, by Karen Soltys and E. L. Loschen (SN 83/3)

Charles Henry Ray: Illinois Medical Truant, Journalist and Lincoln King-Maker, by Emmet F. Pearson (SN 83/4)

Individual copies may be ordered at \$3.50 per copy or the complete set is available for \$15.00. Send order to

Curator, The Pearson Museum SIU School of Medicine P.O. Box 3926 Springfield, Illinois 62708

Medical Humanities Series

The Medical Humanities Series is devoted to publication of original or out-of-print materials relating to perceptions the humanities bring to clinical practice and health care. In this way the Series also serves to promote communication between clinicians, humanists and the general public. The Series is a project of the Department of Medical Humanities at Southern Illinois University School of Medicine. Titles in the Medical Humanities Series include:

On the Illinois Frontier: Dr. Hiram Rutherford, 1840-1848, Willene Hendrick and George Hendrick, eds., Southern Illinois University Press, 1981 (\$11.45 pp.)

Medical Care in Pioneer Illinois, by John K. Crellin, The Pearson Museum, 1982 (\$17.45 pp.)

Healing Arts in Dialogue: Medicine and Literature, Joanne Trautmann, ed., Southern Illinois University Press, 1981 (\$18.45 pp.)

The Visual Arts and Medical Education, Geri Berg, ed., Southern Illinois University Press, 1983 (\$17.45)

Medical Law for the Attending Physician: A Case-Oriented Analysis, Salvatore Francis Fiscina, Southern Illinois University Press, 1982. (\$41.50)

These titles may be ordered through:

Department of Medical Humanities SIU School of Medicine P.O. Box 3926 Springfield, Illinois 62708

Checks or money orders should be made payable to Southern Illinois University Foundation.



Journal of Legal Medicine

The Journal of Legal Medicine is the official quarterly publication of the American Colege of Legal Medicine. Incorporated in 1960, the College has among its objectives the fostering and encouragement of research and study in the field of legal medicine.

Subscriptions for the *Journal* may be placed with Pharmaceutical Communications, Inc., 42-15 Crescent Street, Long Island City, New York, 11101. The subscription rate is \$56.00 per year for subscribers in the United States, Canada and Mexico. The foreign subscription rate, exclusive of Canada and Mexico, is \$68.00 per year. Prepayment is required.

Editor of the *Journal* is Theodore R. LeBlang, J.D., Director of The Law in Medicine Program, Department of Medical Humanities, Southern Illinois University School of Medicine, Springfield, Illinois 62708.

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